Louisiana Environmental Laboratory Accreditation Program

Assessment Checklist for State-Accredited Facilities Rev. 0

Special Instructions

This checklist must be completed by laboratory personnel. Each question must be responded to. LELAP requires that each "Laboratory QS Reference" be filled in with the citation to the specific section of the quality assurance manual or appropriate SOP.

Louisiana Environmental Laboratory Accreditation Program

Assessment Checklist for State-Accredited Facilities

Prepared by: _____ Date: _____

Approved by: _____ Date: _____

This Checklist is printed from an electronic file.
A signed original is available in the files of LADEQ

Organization Name:_____

Address (Mailing): _____

Address (Physical location):_____

_____

Telephone:_____Facsimile:_____

E-mail: _____ Other: _____

Personnel Interviewed:

Name	Title/Group

Assessment Location (if different):_____

Assessment Date: _____ Assessment Organization: _____

Assessor(s): _____ _____
(Signatures)

_____ _____

Receipt acknowledgment by Laboratory:_____

Item	Requirement	LAC Reference	Comment
	Program Requirements		
1	Is the laboratory legally identifiable and does it have a permanent business address and telephone number?	§4703.A	
2	Does the laboratory have the staff and resources sufficient to satisfactorily accomplish those analyses/tests for which accreditation is requested?	§4703.A	
3	Has the laboratory submitted a complete application package and paid all applicable fees?	§4703.B	
4	Are all of the laboratory facilities covered under the scope of accreditation located on the same or adjoining grounds?	§4703.C	
5	Has the laboratory designated an appropriate official (laboratory representative) to represent it in all matters related to attaining and maintaining environmental laboratory accreditation?	§4703.D	
6	Is the laboratory representative a person in a position of authority to ensure that the laboratory complies with the criteria and conditions for accreditation and should have the authority to bind the company in a legal manner?	§4703.D	
7	Does the laboratory have copies of the relevant test method documentation and the requisite equipment for the methods available at the laboratory?	§4705.A	
8	Does the laboratory participate in Department-approved testing programs relevant to their scope of accreditation, to provide suitable evidence of laboratory proficiency?	§4711.A; §4711.C	
9	In cases where it has been determined by the department that an appropriate proficiency test is not accessible or readily available for a particular type of analysis, has the laboratory submitted an "analytical data package" that includes all relevant analytical methodology, technical information, and quality assurance results for the requested method?	§4711.B	
10	Does the laboratory participate in two proficiency test studies per year for each field of testing, at intervals of approximately six months?	§4711.D	
11	Has the laboratory authorized the proficiency test provider to release the results of all proficiency tests to LELAP at the same time that they are submitted to the laboratory?	§4711.F	
12	Has the laboratory performed corrective actions for all proficiency test results that are "unacceptable" for a specific analyte, including the performance of corrective action PTs?	§4711.F	
	Organization and Personnel Requirements		
13	Does the laboratory have the managerial staff with the authority and resources needed to discharge their duties?	§4901.A	
14	Is the technical director or his/her designated representative a full-time member of the laboratory staff with the authority to exercise the day-to-day supervision of the laboratory policies and procedures?	§4901.A	

Item	Requirement	LAC Reference	Comment
15	Does the laboratory specify and document the responsibility, authority, and interrelation of all personnel who manage, perform, or verify work affecting the quality of tests?	§4901.A	
16	Does the documentation include a clear description of the lines of responsibility in the laboratory?	§4901.A.1	
17	Does the documentation include an organizational chart? (Recommended)	§4901.A.2	
18	Does the documentation include job descriptions for all positions?	§4901.A.3	
19	Does the laboratory technical director have a bachelor's degree in science or a minimum of four years' equivalent experience in a related field?	§4901.B.1	
20	Does the laboratory technical director have a minimum of two years' experience in the area of environmental analysis?	§4901.B.2	
21	Does the quality assurance manager have a minimum of a bachelor's degree in science or four years' equivalent experience in a related field?	§4901.C.1	
22	Does the quality assurance manager have a minimum of two years' environmental laboratory experience?	§4901.C.2	
23	Does the quality assurance manager have direct access to the highest level of management for decisions regarding laboratory quality assurance policy and resources, and independent authority regarding quality assurance oversight and implementation of the quality assurance program? **Note:** This organizational position must not report through the technical management of the laboratory?	§4901.C.3	
24	Does the quality assurance manager have the opportunity and freedom to evaluate data objectively without influence from technical or financial management?	§4901.C.3	
25	Does the quality assurance manager have a general knowledge of all analytical methods that are performed by the laboratory?	§4901.C.4	
26	**NOTE:** In smaller laboratories (staff less than 10 total employees), the quality assurance manager's responsibilities may be performed by an upper level technical or operational manager of the facility. Academic and experience requirements apply.	§4901.C.5	
27	Do laboratory supervisors have a minimum of a bachelor's degree or a minimum of four years' experience in a related field?	§4901.D.1	
28	Do laboratory supervisors have a minimum of one year of experience in the area to be supervised, preferably with a minimum of six months' supervisory experience?	§4901.D.2	
29	Do instrument operators have: 1. a minimum of a high school diploma or equivalent, and; 2. satisfactory completion of a short course or structured in-house equivalent on the operation of the instrument (by equipment manufacturer, professional organization, university, or other qualified training facility)?	§4901.E.1-2	

Item	Requirement	LAC Reference	Comment
30	Do instrument operators have a minimum of six months' experience in the operation of the instrument with documentation that acceptable results are achieved by the operator?	§4901.E.2	
31	Do analysts have a minimum of a high school diploma or equivalent, plus proper training in a methods training course or by a qualified analyst?	§4901.F.1.a	
32	Do analysts have a minimum of six months' experience with the analysis procedure(s), with documentation that acceptable results are achieved by the analyst?	§4901.F.1.b	
33	Does the laboratory maintain information on the relevant qualifications, training, and experience of all members of the technical staff?	§4901.G	
34	Does the laboratory provide additional training as needed in order to keep personnel current with new procedures, changes in existing procedures, and/or equipment changes or improvements?	§4901.H	
	Environment		
35	Are the following materials available for review at the laboratory: quality assurance plan; approved methodology manual(s); quality assurance data; and proficiency test data?	§5101.C	
36	Are the laboratory conditions in which the tests are undertaken such as to not invalidate the test results or adversely affect the required accuracy of measurement?	§5101.A	
37	Does the laboratory have the necessary equipment, adequate storage facilities, procedures to preserve the identity, concentration and stability of samples, and energy sources needed for proper testing?	§5101.A	
38	Is the laboratory equipped with devices to monitor essential environmental conditions?	§5103.A	
39	Does the laboratory have adequate workspace, ventilation, light, and access to stable power sources?	§5103.A.1	
40	Does the laboratory have contamination-free work areas as necessary?	§5103. A.3	
41	Does the laboratory have safe working areas and adequate measures to prevent cross contamination of samples?	§5103.A.4	
42	Does the laboratory have adequate storage facilities for samples, extracts, reagents, solvents, reference materials, and standards to preserve their identity, concentration, purity, and stability?	§5103.A.5	
43	Does the laboratory have adequate procedures and facilities in place for collection, storage, and disposal of wastes, including expired chemicals, reagents, solutions, standards, and other material with a limited shelf life?	§5103.A.6	
44	Does the laboratory have appropriate storage for volatile, corrosive, or explosive chemicals and flammable solvents?	§5103.A.8	
45	Does the laboratory have adequate separation of activities to ensure that no activity has an adverse effect on analyses?	§5103.A.9	

Item	Requirement	LAC Reference	Comment
46	Is access to test areas regulated in a manner appropriate to their designated purpose, and entry by persons external to the laboratory controlled?	§5103.B	
47	Are adequate measures shall be taken to ensure cleanliness in the testing area?	§5103.C	
	Test Methods and Procedures		
48	Does the testing laboratory have adequately documented instructions on the use and operation of all relevant equipment, on the handling and preparation of test items, where applicable, and on standard testing techniques, where the absence of such instructions could jeopardize the efficiency of the testing process?	§5105.A	
49	Are all instructions, standards, manuals, and reference data relevant to the work of the testing laboratory maintained up-to-date and readily available to the staff?	§5105.A	
50	Does the testing laboratory use department-approved methodologies that are available to the staff performing the tests?	§5105.B	
51	Has the testing laboratory implemented the written standard operating procedures (SOPs)?	§5105.D	
52	Does the testing laboratory have an acceptable and written quality assurance program plan that is implemented by the staff and readily available to the inspector?	§5105.E	
53	Has the laboratory implemented satisfactory corrective action for all deficiencies or deviations identified in the previous on-site assessment?	§5107.B	
54	Does the laboratory strictly follow all safety practices that are included in or required by any approved method?	§5111.A	
	Quality System Requirements		
55	Does the laboratory maintain their Quality Assurance/Quality Control (QA/QC) program using appropriate document control practices?	§5301.A	
56	Have the quality assurance manual, analytical methods, and administrative procedures necessary to meet requirements of these regulations been reviewed for accuracy and approved for release by the appropriate personnel, distributed, and controlled to ensure the use of the current approved version?	§5301.A	
57	Does the laboratory have documented quality control procedures in use for each analytical procedure?	§5301.A.1	
58	Does the laboratory comply with all quality control procedures required by applicable federal, state, or public health agencies when performing analyses?	§5301.A.2	
59	Does the laboratory have procedures to be followed for feedback and corrective action whenever testing discrepancies are detected or departures from documented policies and procedures occur?	§5301.A.3	
60	Does the laboratory operate an internal quality assurance program appropriate to the type, range, and volume of work performed?	§5301.B	

Item	Requirement	LAC Reference	Comment
61	Has the laboratory management designated a person/persons having responsibility for quality assurance within the laboratory and having direct access to top management? (Quality Assurance Manager)	§5301.B	
62	Has the quality assurance program been documented in a quality assurance manual that is available for use by the laboratory staff?	§5301.C	
63	Is the quality assurance manual maintained by the Quality Assurance Manager?	§5301.C	
64	Does the quality assurance manual contain information regarding the structure of the laboratory (organizational charts and generic position descriptions) including relationship between management, technical operations, support services, and quality systems?	§5301.C.1	
65	Does the quality assurance manual contain information regarding the operational and functional duties and services pertaining to quality assurance, so that each person concerned knows the extent and the limits of his/her responsibility?	§5301.C.2	
66	Does the quality assurance manual contain information regarding general quality assurance procedures?	§5301.C.3	
67	Does the quality assurance manual contain information regarding procedures for feedback and corrective action whenever testing discrepancies are detected?	§5301.C.4	
68	Does the quality assurance manual contain information regarding chain of custody procedures?	§5301.C.5	
69	Does the quality assurance manual contain information regarding a quality policy statement, including objectives and commitments, by management?	§5301.C.6	
70	Does the quality assurance manual contain information regarding procedures for the control and maintenance of documents, including document control of laboratory notebooks, instrument logbooks, standards logbooks, and records for data reduction, validation, storage, and reporting?	§5301.C.7	
71	Does the quality assurance manual contain information regarding the laboratory's procedures for achieving traceability of measurements to NIST reference materials or other traceable commercial vendors?	§5301.C.8	
72	Does the quality assurance manual contain information regarding the laboratory's scope of tests?	§5301.C.9	
73	Does the quality assurance manual contain information regarding procedures for handling submitted samples?	§5301.C.10	
74	Does the quality assurance manual contain information regarding major equipment, as well as the facilities and services used by the laboratory?	§5301.C.11	
75	Does the quality assurance manual contain information regarding procedures for calibration, verification, and maintenance of equipment?	§5301.C.12	

Item	Requirement	LAC Reference	Comment
76	Does the quality assurance manual contain information regarding verification practices including interlaboratory comparisons, proficiency testing programs, use of reference materials, and internal quality control schemes?	§5301.C.13	
77	Does the quality assurance manual contain information regarding the laboratory management arrangements for departures from documented policies and procedures or from standard specifications?	§5301.C.14	
78	Does the quality assurance manual contain information regarding policy and procedures for the resolution of complaints received from clients or other parties, including a requirement that records of all complaint and subsequent actions must be maintained?	§5301.C.15	
79	Does the quality assurance manual contain information regarding procedures for protecting confidentiality and proprietary rights?	§5301.C.16	
80	Does the quality assurance manual contain information regarding procedures for audit and review?	§5301.C.17	
81	Does the quality assurance manual contain information regarding identification of the laboratory's approved signatories?	§5301.C.18	
82	Does the title page of the quality assurance manual have the signed and dated concurrence (with appropriate titles) of all responsible parties, including the quality assurance officer(s), technical director, and the laboratory manager?	§5301.C.18	
83	Does the quality assurance manual contain information regarding processes/procedures for educating and training personnel in their ethical and legal responsibilities, including potential punishment and penalties for improper, unethical, or illegal actions?	§5301.C.19	
84	Does the quality assurance manual contain information regarding processes/procedures for establishing that personnel are adequately experienced in the duties they are expected to carry out and/or receive any needed training?	§5301.C.20	
85	Does the quality assurance manual contain information regarding procedures for reporting analytical results?	§5301.C.21	
86	Does the quality assurance manual include a table of contents and applicable lists of references, glossaries, and appendices?	§5301.C.22	
87	Does the laboratory have documentation that the quality assurance system has been reviewed annually by management to ensure its continued effectiveness?	§5301.D; §5315.A	
88	Is there documentation that the laboratory has conducted annual internal audits to verify the compliance with the laboratory's quality system? Personnel shall not audit their own activities.	§5301.E; §5315.A	
89	Is the quality assurance officer responsible for planning and organizing internal audits?	§5301.E	
90	Does the laboratory have a manual of standard operating procedures (SOPs) available to the analyst and the inspector? **Note:** SOPs may be included as a part or section of the laboratory's quality assurance manual.	§5301.F	

Item	Requirement	LAC Reference	Comment
91	Do the laboratory's test method SOPs include or reference the following required elements? a. identification of the test method; b. applicable matrix or matrices; c. detection limit; d. scope and application, including components to be analyzed; e. summary of test method; f. definitions; g. safety; h. equipment and supplies; i. reagents and standards; j. sample collection, preservation, storage, handling, and chain of custody; k. quality control; l. calibration; m. procedure; n. calculations; o. method performance; p. pollution prevention; q. data assessment and acceptance criteria for quality control measures; r. corrective actions for out-of-control or unacceptable data; s. contingencies for handling out-of-control or unacceptable data; t. waste management; u. references; and v. any tables, diagrams, flowcharts, and validation data;	§5301.F.1.a-v	
92	Does the laboratory have clearly defined, written procedures for procurement and inventory procedures?	§5301.F.2	
93	Does the laboratory have clearly defined, written procedures for preventive maintenance?	§5301.F.3	
94	Does the laboratory have clearly defined, written procedures for recordkeeping and record storage (archives);	§5301.F.4	
95	Does the laboratory have clearly defined, written procedures for data reduction, validation, and reporting?	§5301.F.5	
96	Does the laboratory have clearly defined, written procedures for correcting erroneous reports?	§5301.F.6	
97	Does the laboratory have clearly defined, written procedures for management of laboratory wastes and hazardous materials?	§5301.F.7	
98	Does the laboratory have clearly defined, written procedures for handling complaints registered against the laboratory's testing procedures, reporting procedures, and/or other general operating procedures?	§5301.F.8	
99	Have the written quality assurance/quality control procedures been implemented?	§5301.G	
100	Does the laboratory employ adequate quality controls to monitor tests such as blanks or spikes?	§5301.H.1.a	

Item	Requirement	LAC Reference	Comment
101	Does the laboratory employ adequate tests to define the variability and/or reproducibility of the laboratory results such as duplicates?	§5301.H.1.b	
102	Does the laboratory employ measures to ensure the accuracy of the test data, including sufficient calibration and/or continuing calibrations, use of certified reference materials, proficiency test samples, or other measures?	§5301.H.1.c	
103	Does the laboratory employ measures to evaluate test performance, such as method detection limits, or range of applicability such as linearity?	§5301.H.1.d	
104	Does the laboratory employ selection of appropriate formulae to reduce raw data to final results such as linear regression, internal standards, or statistical packages?	§5301.H.1.e	
105	Does the laboratory employ measures to ensure selection and use of reagents and standards of appropriate quality?	§5301.H.1.f	
106	Does the laboratory employ measures to ensure constant and consistent test conditions (both instrumental and environmental) where required by the method?	§5301.H.1.g	
107	Are all quality control measures assessed and evaluated on an ongoing basis, and are quality control acceptance limits used to determine the validity of the data?	§5301.H.2	
108	Are acceptance/rejection criteria updated at a frequency established by the test method or by the department's standards?	§5301.H.2	
109	Does the laboratory have procedures for the development of acceptance/rejection criteria where no method or regulatory criteria exists?	§5301.H.3	
110	Are the method-specified and/or method-recommended quality control protocols followed?	§5301.H.4	
111	Are the essential quality control standards described in §5301.H used if no protocols are written into the method or if the method protocols are less stringent?	§5301.H.4	
	Equipment and Supplies		
112	Does the laboratory have access to all items of equipment required for correct performance of the analytical procedures for which it is accredited?	§5303.A	
113	Does the laboratory have documentation that all equipment has been properly maintained?	§5303.B	
114	Is defective equipment removed from service and labeled until it has been repaired and shown to function satisfactorily?	§5303.C	
115	Have records been maintained for each item of equipment and for all reference materials significant to the tests performed?	§5303.D	
116	Have maintenance logbook(s) and/or an electronic maintenance database with scheduled backups been maintained for all major equipment?	§5303.D	

Item	Requirement	LAC Reference	Comment
117	Do the equipment maintenance logs include the following required elements? 1. the name of the item of equipment; 2. the manufacturer's name, type identification, and serial number; 3. the date received and the date placed in service; 4. the condition of equipment when placed in service (new, used, or reconditioned); 5. the current location; 6. the location of manufacturer's instruction manual (if available); and 7. the details of maintenance, including history of any damage, malfunction, modification, or repair.	§5303.D.1-7	
118	Are calibration records maintained for all measuring equipment?	§5303.E	
119	Are records maintained for acquisition of all equipment, reagents, and support services utilized by the laboratory in the generation of analytical data?	§5303.F	
120	Are analytical reagent grade (AR) chemicals or equivalent used, unless individual procedures specify other reagent requirements?	§5303.G.1.a	
121	Are stock and working standard solutions checked regularly for signs of decomposition and expiration?	§5303.G.1.b	
122	Are all solutions labeled with identification of the compound, concentration, date prepared, analyst who prepared solution, and expiration date?	§5303.G.1.c	
123	Are all purchased chemicals, solutions, and standards labeled with dates of receipt, the dates of expiration on the container, and the date when the container is opened?	§5303.G.1.d	
124	Is it the practice of the laboratory that when reagents are removed from a container, they must be used entirely or the unused portion discarded? Note: Unused portions of a reagent may not be returned to the original container; and	§5303.G.1.e	
125	Are all compressed gases of commercial grade, unless individual procedures specify other requirements?	§5303.G.1.f	
126	Has all glassware been cleaned and maintained properly as required by the test methodology?	§5303.G.2	
127	Where temperature measurements are required, does the laboratory have access to a NIST (National Institute of Standards and Technology) traceable thermometer?	§5303.G.3.a	
128	Has the calibration of working thermometers been checked at least annually against a NIST-traceable certified thermometer, and the results recorded and documented per thermometer?	§5303.G.3.b	
129	Has the calibration of dial-type thermometers been checked at least quarterly against a NIST traceable thermometer and results recorded per thermometer?	§5303.G.3.c	

Item	Requirement	LAC Reference	Comment
130	Have all thermometers been labeled when calibrated and the correction factor recorded?	§5303.G.3.d	
131	Does the laboratory have records showing daily (or before each use) functional/calibration checks for analytical balances and monthly functional/calibration checks for pan balances?	§5303.H.1.a	
132	Have the reference weights used for balance calibration checks been recertified every two years?	§5303.H.1.a	
133	Have all balances been calibrated and serviced at a minimum of once per year, and has the service date been recorded on the balance?	§5303.H.1.b	
134	Are balances only used with suitable support?	§5303.H.1.c	
135	For pH measurements, does the laboratory use a pH meter with appropriate electrode with scale graduations at least 0.1 pH units (calibrated to ± 0.1 pH units for each use period) with temperature correction?	§5303.H.2.a	
136	For pH measurements, does the laboratory use either a thermometer or a temperature sensor for automatic temperature compensation?	§5303.H.2.b	
137	For pH measurements, have records been maintained indicating calibration daily or before each use, whichever is less frequent?	§5303.H.2.c	
138	For pH measurements, are aliquots of standard pH 4 and pH 7 or pH 7 and pH 10 used only once?	§5303.H.2.d	
139	For conductivity measurements, is a conductivity meter and probe of sufficient sensitivity used?	§5303.H.3.a	
140	For conductivity measurements, have records been kept to show a daily or before each use calibration check, whichever is less frequent? **Note:** Calibration shall be within the range of interest using standard solutions.	§5303.H.3.b	
141	For conductivity measurements, have records been kept showing that the cell constant has been determined annually?	§5303.H.3.c	
142	Does each refrigerator have a thermometer immersed in liquid to the appropriate immersion line?	§5303.H.4.a	
143	Are refrigerator thermometers graduated in increments no larger than 1°C?	§5303.H.4.b	
144	Have temperatures for each refrigerator been recorded for each day in use for laboratory activities?	§5303.H.4.c	
145	Are samples stored in separate refrigerators from all standards where a potential for cross-contamination exists?	§5303.H.4.d	
146	Have refrigerator temperature been maintained between 1°C and 6°C (inclusive), and have freezer temperature been maintained below 0°C?	§5303.H.4.e	
147	Have visual comparison devices been calibrated according to manufacturer's specifications and/or test methodologies?	§5303.H.5.a	
148	Have the calibration results for visual comparison devices been recorded and maintained?	§5303.H.5.b	
149	For ovens, incubators, or baths, is there documentation that the temperature has been adequately controlled?	§5303.H.6.a	

Item	Requirement	LAC Reference	Comment
150	For ovens, incubators, or baths, have records been kept to show that temperature has been maintained (e.g., beginning and end of each use cycle or daily for extended drying periods)?	§5303.H.6.b	
	Calibration		
151	Have measuring and testing equipment used by the testing laboratory been calibrated, where appropriate, before being put into service and thereafter according to an established program?	§5305.A	
152	Does the laboratory have an overall program of calibration of equipment designed and operated so as to ensure that measurements made in the testing laboratory are traceable (where the concept is applicable) to national standards of measurement and, where available, to international standards of measurement specified by the International Committee of Weights and Measures?	§5305.B	
153	Where the concept of traceability to national or international standards of measurement is not applicable, has the testing laboratory provided satisfactory evidence of correlation or accuracy of test results (e.g., by participation in a suitable program of interlaboratory comparisons)?	§5305.B	
154	Does the laboratory maintain a record of all calibration data including frequency, conditions, and standards used for all analytical methodology?	§5305.C	
155	Has the laboratory verified and documented all standards versus primary (reference) standards?	§5305.D	
	Test Methods and Procedures		
156	Does the laboratory have procedures for making and controlling revisions to in-house SOPs, using revised SOPs only after written authorization from the designated laboratory authority?	§5307.A	
157	Are all quality control procedures documented and available to the staff as required in LAC 33:I.5301.C?	§5307.B	
158	Are all manual calculation and data transfers subject to appropriate checks?	§5307.C	
159	When manual calculations have been checked by a supervisor or another analyst, have the results been initialed and dated on the work sheet by the individual who verified the results?	§5307.C.1	
160	Where results are derived by electronic data processing techniques, is stability of the system such that the accuracy of the results is not affected?	§5307.C.2	
161	Does the laboratory have the ability to detect malfunctions in computer hardware during program execution and to take appropriate corrective action?	§5307.C.2	
162	Does the laboratory adhere to good automated laboratory practices (GALP)? (Recommended)	§5307.C.2	
163	Does the laboratory employ computer software that is appropriate for the intended use?	§5307.C.2.a	
164	Has the laboratory established and implemented procedures for the protection of the integrity of data?	§5307.C.2.b	

Item	Requirement	LAC Reference	Comment
165	Do the laboratory procedures for protection of the integrity of data address the following required elements? i. integrity of data entry or capture; ii. data storage; iii. data transmission; and iv. data processing;	§5307.C.2.b.i-iv	
166	Have computer and automated equipment been provided with acceptable environmental operating conditions in order to maintain the operating integrity of the system?	§5307.C.2.c	
167	Have appropriate procedures been implemented in order to maintain the security of data, including prevention of unauthorized access to computer records and prevention of unauthorized amendments or changes to computer records?	§5307.C.2.d	
168	Whenever samples are subcontracted to another environmental testing laboratory, does the original laboratory maintain a verifiable copy of results with a chain of custody?	§5307.D	
169	Does the laboratory ensure that any subcontracted laboratory used is properly accredited for the scope of testing performed?	§5307.D	
	Reports		
170	Do the laboratory's test reports accurately, clearly, and unambiguously present the test results and all other relevant information?	§5313.A	
171	Does each test report include the following required information? 1. name and address of testing laboratory; 2. title of report, unique identification of report (such as log number), identification of each page of the report by number, and total number of pages in the report; 3. description and identification of the sample(s); 4. date of receipt of sample(s) and date(s) of performance of test, as appropriate; 5. identification of the test method; 6. any deviations, additions to, or exclusions from the test method and any other information relevant to a specific test; 7. disclosure of any nonstandard test method utilized; 8. measurements, examinations, and results, accompanied by appropriate quality assurance (QA) documents; 9. a statement on measurement uncertainty (where relevant); 10. a signature and title of person(s) accepting technical responsibility for the test report and date of issue; 11. if applicable, a statement that indicates that the results relate only to the items tested; and 12. if applicable, a statement that indicates that the report shall not be reproduced in full (or in part, if required) without the written approval of the customer.	§5313.B.1-12	

Item	Requirement	LAC Reference	Comment
172	Are corrections or additions to a test report after issue made only by a further document suitably marked (e.g., "Supplement to test report log number nnn" or as otherwise identified), and which meets the relevant requirements of §5313?	§5313.C	
173	In instances where the laboratory transmits a report via telephone, telex, facsimile (FAX), or any other means of electronic transmittal, does the laboratory have in place a written procedure that will provide protection and/or preservation of client confidentiality?	§5313.D	
	Records		
174	Does the laboratory maintain a record system that produces accurate, readily available records (including archived SOPs) that document all laboratory activities?	§5315.A	
175	Does the testing laboratory retain on record all original raw data and observations, calculations and derived data, calibration records, and the final test report in a manner in which the continuity and integrity of the analytical process is preserved?	§5315.A	
176	Does the laboratory retain all records for a minimum of 10 years or as required by regulatory or legal requirement?	§5315.A	
177	Where computers or automated equipment are used for the capture, processing, manipulation, recording, reporting, storage, or retrieval of test data, does the laboratory ensure that the following requirements are met? 1. computer software must be documented and adequate for use; 2. procedures must be established and implemented to protect the integrity of data. Such procedures shall include, at a minimum, integrity of data entry or capture, data storage, data transmission, and data processing; 3. computers and automated equipment must be maintained to ensure proper functioning and retrieval of data; and 4. procedures must be developed and implemented to maintain security of data, including prevention of unauthorized access to, or unauthorized amendment of, computer records.	§5315.A.1-4	
178	Are all records and test reports held securely and in confidence to the client, unless otherwise required by law?	§5315.B	
179	Does the testing laboratory maintain a system that provides for retrievability of the chain of custody of the sample source, the analytical method, results (including calibration and instrument checks), the analyst performing the analysis, and the date?	§5315.C	
180	If laboratory records indicate that incorrect or questionable data has been generated by defective or improperly operated equipment, erroneous data entry, or other such anomalies, and a report has been issued, does the laboratory immediately notify the client and issue a written, corrected or amended report to the client?	§5315.C	
181	Are current reference documents (e.g., EPA manuals, CFRs, Standard Methods) maintained and available to the staff?	§5315.D	

Item	Requirement	LAC Reference	Comment
182	Are all entries to laboratory analytical records made in a legible, permanent fashion?	§5315.E	
183	Are any corrections to laboratory analytical record made without obliterating original entries, and initialed and dated?	§5315.E	
184	Has a permanent record of employees' signatures and initials been maintained?	§5315.F	
185	Has the laboratory maintained administrative records (e.g., training records) in a manner in which the continuity, integrity, and retrievability processes are preserved?	§5315.G	
	Unacceptable Samples		
186	Does the laboratory have a written procedure for handling of questionable samples in cases where a sample is received by the testing laboratory and it is apparent or suspected that the sample protocol has not been followed? **Note:** The laboratory may choose to notify the customer and either request another sample or, if the customer insists upon analysis of the sample, reserve the right to include a disclaimer in the final report identifying the sample anomaly. This disclaimer must be permanently attached to the final report.	§5501.A	
	Display of Accreditation Certificate		
187	Is the current accreditation certificate displayed at all times in a location visible to the public in the laboratory?	§5701.A	
188	Does the laboratory accurately represent its accreditation status in laboratory reports, catalogs, advertising, business solicitations, or proposals?	§5701.C	
	Changes in Laboratory Operation		
189	Has the laboratory reported any changes in laboratory name, ownership, location, personnel, facilities, methodology, or any factors significantly affecting the performance of analyses for which the laboratory was originally accredited, within 30 days of occurrence?	§5707	